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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/754,153	01/09/2004	Roy Patrick McMahon	RAYTP0246US	7468

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EXAMINER

JOHNSON, STEPHEN

ART UNIT	PAPER NUMBER
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3641

DATE MAILED: 01/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/754,153

Applicant(s)

MCMAHON, ROY PATRICK

Examiner

Stephen M. Johnson

Art Unit

3641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17-24 is/are allowed.
- 6) ☒ Claim(s) 1-11, 25 and 26 is/are rejected.
- 7) ☒ Claim(s) 12-16 and 27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

Art Unit: 3641

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-11 and 25-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Ebert et al. (116 B2).

Ebert et al. (116 B2) disclose an umbilical cable comprising :

- | | |
|------------------------------------------------------------------|---------------------|
| a) cabling including a plurality of conductive wires; | 32 |
| b) a first connector on one end; | 34 |
| c) a second connector on the other end; | 36 |
| d) an interface circuit that receives a non-standard combination | 46 |
| of signals and converts them to a set of signals receivable | |
| by a smart weapon; | |
| e) a memory; | 71 |
| f) a bus controller to the smart weapon; | col. 5, lines 31-52 |
| g) source operation circuitry; | 16, 26, 28 |
| h) at least one release signal; | col. 8, lines 10-14 |
| i) a master arm signal; | col. 8, lines 10-16 |
| j) a communication bus to the aircraft; | 24 and fig. 5 |
| k) a pilot-operated digital processor; | 18 |

Art Unit: 3641

- l) a ground loading device; 10 (when on ground)
- m) a backshell; and see fig. 4
- n) a communication bus included within the umbilical cable. 74, 76

3. Applicant's arguments are addressed as follows. It is argued that Ebert et al. have the capability of controlling smart weapons of one type according to one format but do not necessarily communicate to the format of another type of smart weapon. In response, this may be the case. However, it has no bearing on the claims in their current format considering that such features have not been claimed. It is further argued that Ebert et al. translates commands in accordance with one standard to a smart weapon in accordance with another standard. In response, as far as the receiving smart weapon is concerned, the signals in the Mil-std-1760 format are not standardized in a way that they can be used by the smart weapon. As such they meet the claim limitation "non-standard ... signals". Only signals in the MK 82 format are usable by the smart weapon and therefore only these signals are considered to be standardized. All other signals are not standardized for use by the smart weapon and therefor must be considered non-standardized. Further, note that almost any signal is of some type of format or another and could therefore be considered standardized for that usage. If the signals were not, they would not be decipherable at the receiving location and consequently useless. It is further argued that the umbilical cable of claim 1 is equipped to enable aircraft which are not equipped to handle any type of smart weapon standard to nevertheless be able to utilize smart weapons. In response, this feature is also not claimed. Further, it seems well within the ability of one of ordinary skill to use other formats than the two listed. MK 82 format and Mil-std-1760 format are just listed as two examples.

Art Unit: 3641

Applicant further argues that the signals received are non-standardized signals coming from the aircraft. Once again, as far as the receiver is concerned, Mil-std-1760 formatted signals are non-standardized since they do not meet the standard that they accept. A Mil-std-1760 formatted signal received by a receiver at the second end of the connector will be just as useless as any other signal that does not meet its standardized format of MK 82. Since the signal initially sent by aircraft does not meet an acceptable format of the receiver, it must be considered to be of a non-standardized format relative to that receiver.

With regard to the argument raised with regard to claim 10 and the issue of the claim language directed to “the pilot-operated digital processor is portable”, any element of aircraft launch platform 14 could be removed or substituted as required via maintenance or system failures. As such any of the elements meets the broad claim limitation directed to being “portable”. It is further argued that a ground loading device is something separate and apart from the aircraft itself. The examiner considers “a ground loading device” to be a loading device that is located on the ground during loading.

4. Claims 12-16 and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Claims 17-24 are allowed.

6. Applicant's arguments filed on 11/30/2004 have been fully considered but they are not persuasive. These arguments have been addressed in the preceding paragraphs of this Office action.

Art Unit: 3641

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. Johnson whose telephone number is 703-306-4158. The examiner can normally be reached on Tuesday through Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 703-306-4198. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-4177.

The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9326. The fax phone number for after final communications is (703) 872-9327.



STEPHEN M. JOHNSON
PRIMARY EXAMINER

Stephen M. Johnson
Primary Examiner
Art Unit 3641